

## Calpain 1 monoclonal antibody

Catalog: MB66825

Host: Mouse

Reactivity: Human

### BackGround:

Calpain 1, also designated m-Calpain, is an intracellular calcium-dependent protease that cleaves cytoskeletal and submembranous proteins. Calpains are nonlysosomal, calcium-activated intracellular cysteine proteases. Calpains mediate specific Ca<sup>2+</sup>-dependent processes including cell fusion, mitosis and meiosis. Calpains are heterodimers of a small regulatory subunit and one of three large catalytic subunits, designated Calpain 1, Calpain 2 and Calpain p94. Calpastatin regulates Calpain by inhibiting both the proteolytic activity of Calpain and its binding to membranes. Calpastatin exists in two types, tissue type and erythrocyte type, resulting from both alternative splicing and proteolytic processing. Calpain 1 co-localizes with human leukocyte antigen-DR (HLA-DR) on activated microglia in the aging brain. Calpain influences the process of spermatogenesis and the events preceding fertilization, such as the acrosome reaction.

### Product:

Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

### Molecular Weight:

~ 83 kDa

### Swiss-Prot:

P07384

### Purification&Purity:

This antibody is purified through a protein G column.

### Applications:

WB (1/500 - 1/1000), IHC (1/50 - 1/200), FC (1/10 - 1/50)

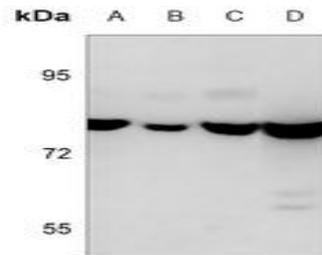
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

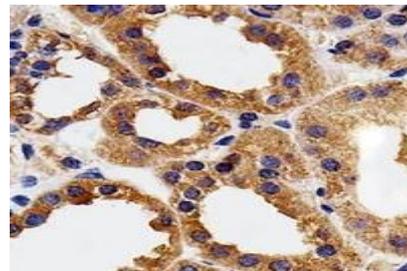
### Specificity:

Recognizes endogenous levels of Calpain 1 protein.

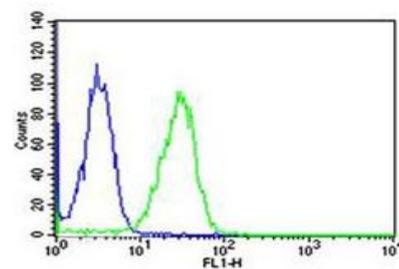
### DATA:



Western blot analysis of Calpain 1 expression in A431 (A), A549 (B), MCF7 (C), U251 MG (D) whole cell lysates.



Immunohistochemical analysis of Calpain 1 staining in human kidney formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



### Note:

For research use only, not for use in diagnostic procedure.

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## PRODUCT DATA SHEET

Bioworld Technology, Inc.

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